



SEQUENCE LISTING

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CellGate, Inc.

<120> Compositions and Methods for Enhancing
Drug Delivery Across and Into Ocular Tissues

<130> 019801-000240US

<140> US 10/083,960
<141> 2002-02-25

<150> US 60/150,510
<151> 1999-08-24

<150> US 09/648,400
<151> 2000-08-24

<150> US 09/792,480
<151> 2001-02-23

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1 5

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<220>
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1 5

<210> 3
<211> 7
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<213> Artificial Sequence

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<220>
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1 5

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<220>
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<400> 4
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1 5

<210> 5
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<220>
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1 5

<210> 6
<211> 7
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<220>
<223> L-Arg heptamer after release of cyclosporine by
      cleavage of the pH sensitive linker group

<221> MOD_RES
<222> (1)...(1)
<223> Xaa =
      2-[4-benzyl-2,5-diketopiperazinyl]-acetyl-arginine

<400> 6
Xaa Arg Arg Arg Arg Arg Arg
1 5

<210> 7
<211> 10
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<220>
<223> unlabeled peptide

<221> MOD_RES
<222> (10)...(10)
<223> Xaa = cysteinamide

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<400> 7
Arg Arg Arg Arg Arg Arg Gly Gly Xaa
1 5 10

<210> 8
<211> 10
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<220>
<223> analog of Tat-49-57

<221> MOD_RES
<222> (1)...(1)
<223> Xaa = fluorescein conjugated aminohexanoic acid
(Fl-ahx)

<400> 8
Xaa Arg Lys Lys Arg Arg Gln Arg Arg Arg
1 5 10

<210> 9
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<220>
<223> Tat-49-56 truncated analog of Tat-49-57

<221> MOD_RES
<222> (1)...(1)
<223> Xaa = fluorescein conjugated aminohexanoic acid
(Fl-ahx)

<400> 9
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1 5

<210> 10
<211> 8
<212> PRT
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<220>
<223> Tat-49-55 truncated analog of Tat-49-57

<221> MOD_RES
<222> (1)...(1)
<223> Xaa = fluorescein conjugated aminohexanoic acid
(Fl-ahx)

<400> 10
Xaa Arg Lys Lys Arg Arg Gln Arg
1 5

<210> 11
<211> 9
<212> PRT
<213> Artificial Sequence

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<220>
<223> Tat-50-57 truncated analog of Tat-49-57

<221> MOD_RES
<222> (1)...(1)
<223> Xaa = fluorescein conjugated aminohexanoic acid
(Fl-ahx)

<400> 11
Xaa Lys Lys Arg Arg Gln Arg Arg Arg
1 5

<210> 12
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> Tat-51-57 truncated analog of Tat-49-57

<221> MOD_RES
<222> (1)...(1)
<223> Xaa = fluorescein conjugated aminohexanoic acid
(Fl-ahx)

<400> 12
Xaa Lys Arg Arg Gln Arg Arg Arg
1 5

<210> 13
<211> 10
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<220>
<223> A-49 alanine-substituted analog of Tat-49-57

<221> MOD_RES
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<223> Xaa = fluorescein conjugated aminohexanoic acid
(Fl-ahx)

<400> 13
Xaa Ala Lys Lys Arg Arg Gln Arg Arg Arg
1 5 10

<210> 14
<211> 10
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<220>
<223> A-50 alanine-substituted analog of Tat-49-57

<221> MOD_RES
<222> (1)...(1)
<223> Xaa = fluorescein conjugated aminohexanoic acid
(Fl-ahx)

<400> 14
Xaa Arg Ala Lys Arg Arg Gln Arg Arg Arg
1 5 10

<210> 15
<211> 10
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<220>
<223> A-51 alanine-substituted analog of Tat-49-57

<221> MOD_RES
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<223> Xaa = fluorescein conjugated aminohexanoic acid
(Fl-ahx)

<400> 15
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1 5 10

<210> 16
<211> 10
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<220>
<223> A-52 alanine-substituted analog of Tat-49-57

<221> MOD_RES
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<223> Xaa = fluorescein conjugated aminohexanoic acid
(Fl-ahx)

<400> 16
Xaa Arg Lys Lys Ala Arg Gln Arg Arg Arg
1 5 10

<210> 17
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> A-53 alanine-substituted analog of Tat-49-57

<221> MOD_RES
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<223> Xaa = fluorescein conjugated aminohexanoic acid
(Fl-ahx)

<400> 17
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1 5 10

<210> 18
<211> 10
<212> PRT
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<223> A-54 alanine-substituted analog of Tat-49-57

<221> MOD_RES
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<223> Xaa = fluorescein conjugated aminohexanoic acid
      (Fl-ahx)

<400> 18
Xaa Arg Lys Lys Arg Arg Ala Arg Arg Arg
  1           5           10

<210> 19
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> A-55 alanine-substituted analog of Tat-49-57

<221> MOD_RES
<222> (1)...(1)
<223> Xaa = fluorescein conjugated aminohexanoic acid
      (Fl-ahx)

<400> 19
Xaa Arg Lys Lys Arg Arg Gln Ala Arg Arg
  1           5           10

<210> 20
<211> 10
<212> PRT
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<220>
<223> A-56 alanine-substituted analog of Tat-49-57

<221> MOD_RES
<222> (1)...(1)
<223> Xaa = fluorescein conjugated aminohexanoic acid
      (Fl-ahx)

<400> 20
Xaa Arg Lys Lys Arg Arg Gln Arg Ala Arg
  1           5           10

<210> 21
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> A-57 alanine-substituted analog of Tat-49-57

<221> MOD_RES
<222> (1)...(1)
<223> Xaa = fluorescein conjugated aminohexanoic acid
      (Fl-ahx)

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<400> 21
Xaa Arg Lys Lys Arg Arg Gln Arg Arg Ala
1 5 10

<210> 22
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> Tat-57-49 retro-isomer of Tat-49-57

<221> MOD_RES
<222> (1)...(1)
<223> Xaa = fluorescein conjugated aminohexanoic acid
(Fl-ahx)

<400> 22
Xaa Arg Arg Arg Gln Arg Arg Lys Lys Arg
1 5 10

<210> 23
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<223> R5 Arg oligomer

<221> MOD_RES
<222> (1)...(1)
<223> Xaa = fluorescein conjugated aminohexanoic acid
(Fl-ahx)

<400> 23
Xaa Arg Arg Arg Arg Arg
1 5

<210> 24
<211> 7
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<213> Artificial Sequence

<220>
<223> R6 Arg oligomer

<221> MOD_RES
<222> (1)...(1)
<223> Xaa = fluorescein conjugated aminohexanoic acid
(Fl-ahx)

<400> 24
Xaa Arg Arg Arg Arg Arg Arg
1 5

<210> 25
<211> 8
<212> PRT
<213> Artificial Sequence

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<220>
<223> R7 Arg oligomer

<221> MOD_RES
<222> (1)...(1)
<223> Xaa = fluorescein conjugated aminohexanoic acid
      (Fl-ahx)

      <400> 25
Xaa Arg Arg Arg Arg Arg Arg Arg
1          5

      <210> 26
      <211> 9
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      <213> Artificial Sequence

      <220>
      <223> R8 Arg oligomer

      <221> MOD_RES
      <222> (1)...(1)
      <223> Xaa = fluorescein conjugated aminohexanoic acid
            (Fl-ahx)

      <400> 26
Xaa Arg Arg Arg Arg Arg Arg Arg
1          5

      <210> 27
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      <213> Artificial Sequence

      <220>
      <223> R9 Arg oligomer

      <221> MOD_RES
      <222> (1)...(1)
      <223> Xaa = fluorescein conjugated aminohexanoic acid
            (Fl-ahx)

      <400> 27
Xaa Arg Arg Arg Arg Arg Arg Arg Arg
1          5          10

      <210> 28
      <211> 9
      <212> PRT
      <213> Artificial Sequence

      <220>
      <223> HIV-1 Tat protein basic region

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Arg Lys Lys Arg Arg Gln Arg Arg Arg
1          5

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<210> 29
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<213> Artificial Sequence

<220>
<223> Antennapedia homeodomain region residues 43-58

<400> 29
Arg Gln Ile Lys Ile Trp Phe Gln Asn Arg Arg Met Lys Trp Lys Lys
1 5 10 15

<210> 30
<211> 17
<212> PRT
<213> Artificial Sequence

<220>
<223> Antennapedia homeodomain region residues 43-58

<221> MOD_RES
<222> (1)...(1)
<223> Xaa = fluorescein conjugated amino hexanoic acid
(F1-ahx)

<400> 30
Xaa Arg Gln Ile Lys Ile Trp Phe Gln Asn Arg Arg Met Lys Trp Lys
1 5 10 15
Lys

<210> 31
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> delivery enhancing transporter moiety
DTPA-aca-R7-CO2H

<221> MOD_RES
<222> (1)...(1)
<223> amino acaproic acid (aca) linked to
diethylenetriaminepentaacetic acid (DTPA)

<400> 31
Xaa Arg Arg Arg Arg Arg Arg Arg
1 5

<210> 32
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> delivery enhancing transporter moiety
NH-2-R-7CCONH-2.8TFA

<221> MOD_RES
<222> (8)...(8)
<223> Xaa = cysteinaminde

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1 5

<210> 33
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
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<221> MOD_RES
<222> (2)...(2)
<223> Xaa = Gly, beta-alanine, gamma-amino butyric acid
      or epsilon-amino caproic acid

<221> MOD_RES
<222> (5)...(5)
<223> Xaa = Gly, beta-alanine, gamma-amino butyric acid
      or epsilon-amino caproic acid

<400> 33
Arg Xaa Arg Arg Xaa Arg Arg
1 5

<210> 34
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<220>
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      or epsilon-amino caproic acid

<221> MOD_RES
<222> (5)...(5)
<223> Xaa = Gly, beta-alanine, gamma-amino butyric acid
      or epsilon-amino caproic acid

<221> MOD_RES
<222> (8)...(8)
<223> Xaa = Gly, beta-alanine, gamma-amino butyric acid
      or epsilon-amino caproic acid

<400> 34
Arg Xaa Arg Arg Xaa Arg Arg Xaa Arg Arg
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<210> 35
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<213> Artificial Sequence

<220>
<223> delivery enhancing transporter moiety

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<222> (2)...(2)
<223> Xaa = Gly, beta-alanine, gamma-amino butyric acid
      or epsilon-amino caproic acid

<221> MOD_RES
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<223> Xaa = Gly, beta-alanine, gamma-amino butyric acid
      or epsilon-amino caproic acid

<221> MOD_RES
<222> (8)...(8)
<223> Xaa = Gly, beta-alanine, gamma-amino butyric acid
      or epsilon-amino caproic acid

<221> MOD_RES
<222> (11)...(11)
<223> Xaa = Gly, beta-alanine, gamma-amino butyric acid
      or epsilon-amino caproic acid

<400> 35
Arg Xaa Arg Arg Xaa Arg Arg Xaa Arg Arg Xaa Arg Arg
1           5           10

<210> 36
<211> 16
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<220>
<223> delivery enhancing transporter moiety

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<223> Xaa = Gly, beta-alanine, gamma-amino butyric acid
      or epsilon-amino caproic acid

<221> MOD_RES
<222> (5)...(5)
<223> Xaa = Gly, beta-alanine, gamma-amino butyric acid
      or epsilon-amino caproic acid

<221> MOD_RES
<222> (8)...(8)
<223> Xaa = Gly, beta-alanine, gamma-amino butyric acid
      or epsilon-amino caproic acid

<221> MOD_RES
<222> (11)...(11)
<223> Xaa = Gly, beta-alanine, gamma-amino butyric acid
      or epsilon-amino caproic acid

<221> MOD_RES
<222> (14)...(14)
<223> Xaa = Gly, beta-alanine, gamma-amino butyric acid
      or epsilon-amino caproic acid

<400> 36
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1           5           10           15

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<210> 37
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> delivery enhancing transporter moiety

<221> MOD_RES
<222> (2)...(2)
<223> Xaa = Gly or epsilon-amino caproic acid

<221> MOD_RES
<222> (5)...(5)
<223> Xaa = Gly or epsilon-amino caproic acid

<221> MOD_RES
<222> (8)...(8)
<223> Xaa = Gly or epsilon-amino caproic acid

<400> 37
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 1           5           10

<210> 38
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
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<221> MOD_RES
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<223> Xaa = Gly, beta-alanine, gamma-amino butyric acid
      or epsilon-amino caproic acid

<221> MOD_RES
<222> (4)...(4)
<223> Xaa = Gly, beta-alanine, gamma-amino butyric acid
      or epsilon-amino caproic acid

<221> MOD_RES
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<223> Xaa = Gly, beta-alanine, gamma-amino butyric acid
      or epsilon-amino caproic acid

<221> MOD_RES
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<223> Xaa = Gly, beta-alanine, gamma-amino butyric acid
      or epsilon-amino caproic acid

<400> 38
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 1           5

<210> 39
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<212> PRT
<213> Artificial Sequence

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<220>
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<221> MOD_RES
<222> (2)...(2)
<223> Xaa = Gly, beta-alanine, gamma-amino butyric acid
      or epsilon-amino caproic acid

<221> MOD_RES
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<223> Xaa = Gly, beta-alanine, gamma-amino butyric acid
      or epsilon-amino caproic acid

<221> MOD_RES
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      or epsilon-amino caproic acid

<221> MOD_RES
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<223> Xaa = Gly, beta-alanine, gamma-amino butyric acid
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<221> MOD_RES
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<223> Xaa = Gly, beta-alanine, gamma-amino butyric acid
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 1           5           10

<210> 40
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<221> MOD_RES
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      or epsilon-amino caproic acid

<221> MOD_RES
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<223> Xaa = Gly, beta-alanine, gamma-amino butyric acid
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<221> MOD_RES
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<223> Xaa = Gly, beta-alanine, gamma-amino butyric acid
      or epsilon-amino caproic acid

<221> MOD_RES
<222> (12)...(12)
<223> Xaa = Gly, beta-alanine, gamma-amino butyric acid
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1           5           10

<210> 41
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<221> MOD_RES
<222> (4)...(4)
<223> Xaa = Gly, beta-alanine, gamma-amino butyric acid
      or epsilon-amino caproic acid

<221> MOD_RES
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<223> Xaa = Gly, beta-alanine, gamma-amino butyric acid
      or epsilon-amino caproic acid

<221> MOD_RES
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<223> Xaa = Gly, beta-alanine, gamma-amino butyric acid
      or epsilon-amino caproic acid

<221> MOD_RES
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<223> Xaa = Gly, beta-alanine, gamma-amino butyric acid
      or epsilon-amino caproic acid

<221> MOD_RES
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<223> Xaa = Gly, beta-alanine, gamma-amino butyric acid
      or epsilon-amino caproic acid

<221> MOD_RES
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<400> 41
Arg Xaa Arg
1           5           10           15

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<210> 42
<211> 17
<212> PRT
<213> Artificial Sequence

<220>
<223> delivery enhancing transporter moiety

<221> MOD_RES
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      or epsilon-amino caproic acid

<221> MOD_RES
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<223> Xaa = Gly, beta-alanine, gamma-amino butyric acid
      or epsilon-amino caproic acid

<221> MOD_RES
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<223> Xaa = Gly, beta-alanine, gamma-amino butyric acid
      or epsilon-amino caproic acid

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      or epsilon-amino caproic acid

<221> MOD_RES
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<223> Xaa = Gly, beta-alanine, gamma-amino butyric acid
      or epsilon-amino caproic acid

<221> MOD_RES
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<223> Xaa = Gly, beta-alanine, gamma-amino butyric acid
      or epsilon-amino caproic acid

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      or epsilon-amino caproic acid

<221> MOD_RES
<222> (16)...(16)
<223> Xaa = Gly, beta-alanine, gamma-amino butyric acid
      or epsilon-amino caproic acid

<400> 42
Arg Xaa Arg Xaa
   1           5           10          15
Arg

<210> 43
<211> 19
<212> PRT
<213> Artificial Sequence

<220>
<223> delivery enhancing transporter moiety

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<221> MOD_RES
<222> (2)...(2)
<223> Xaa = Gly, beta-alanine, gamma-amino butyric acid
      or epsilon-amino caproic acid

<221> MOD_RES
<222> (4)...(4)
<223> Xaa = Gly, beta-alanine, gamma-amino butyric acid
      or epsilon-amino caproic acid

<221> MOD_RES
<222> (6)...(6)
<223> Xaa = Gly, beta-alanine, gamma-amino butyric acid
      or epsilon-amino caproic acid

<221> MOD_RES
<222> (8)...(8)
<223> Xaa = Gly, beta-alanine, gamma-amino butyric acid
      or epsilon-amino caproic acid

<221> MOD_RES
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<223> Xaa = Gly, beta-alanine, gamma-amino butyric acid
      or epsilon-amino caproic acid

<221> MOD_RES
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<223> Xaa = Gly, beta-alanine, gamma-amino butyric acid
      or epsilon-amino caproic acid

<221> MOD_RES
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<223> Xaa = Gly, beta-alanine, gamma-amino butyric acid
      or epsilon-amino caproic acid

<221> MOD_RES
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<223> Xaa = Gly, beta-alanine, gamma-amino butyric acid
      or epsilon-amino caproic acid

<221> MOD_RES
<222> (18)...(18)
<223> Xaa = Gly, beta-alanine, gamma-amino butyric acid
      or epsilon-amino caproic acid

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      1           5           10          15
Arg Xaa Arg

<210> 44
<211> 21
<212> PRT
<213> Artificial Sequence

<220>
<223> delivery enhancing transporter moiety

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<221> MOD_RES
<222> (2)...(2)
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      or epsilon-amino caproic acid

<221> MOD_RES
<222> (4)...(4)
<223> Xaa = Gly, beta-alanine, gamma-amino butyric acid
      or epsilon-amino caproic acid

<221> MOD_RES
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<223> Xaa = Gly, beta-alanine, gamma-amino butyric acid
      or epsilon-amino caproic acid

<221> MOD_RES
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<223> Xaa = Gly, beta-alanine, gamma-amino butyric acid
      or epsilon-amino caproic acid

<221> MOD_RES
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<223> Xaa = Gly, beta-alanine, gamma-amino butyric acid
      or epsilon-amino caproic acid

<221> MOD_RES
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<223> Xaa = Gly, beta-alanine, gamma-amino butyric acid
      or epsilon-amino caproic acid

<221> MOD_RES
<222> (14)...(14)
<223> Xaa = Gly, beta-alanine, gamma-amino butyric acid
      or epsilon-amino caproic acid

<221> MOD_RES
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<223> Xaa = Gly, beta-alanine, gamma-amino butyric acid
      or epsilon-amino caproic acid

<221> MOD_RES
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<223> Xaa = Gly, beta-alanine, gamma-amino butyric acid
      or epsilon-amino caproic acid

<221> MOD_RES
<222> (20)...(20)
<223> Xaa = Gly, beta-alanine, gamma-amino butyric acid
      or epsilon-amino caproic acid

<400> 44
Arg Xaa Arg Xaa Arg Xaa Arg Xaa Arg Xaa Arg Xaa Arg Xaa
    1           5           10          15
Arg Xaa Arg Xaa Arg
    20

<210> 45
<211> 13
<212> PRT
<213> Artificial Sequence

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<220>
<223> delivery enhancing transporter moiety

<221> MOD_RES
<222> (2)...(2)
<223> Xaa = Gly or epsilon-amino caproic acid

<221> MOD_RES
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<223> Xaa = Gly or epsilon-amino caproic acid

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<221> MOD_RES
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<223> Xaa = Gly or epsilon-amino caproic acid

<221> MOD_RES
<222> (12)...(12)
<223> Xaa = Gly or epsilon-amino caproic acid

<400> 45
Arg Xaa Arg Xaa Arg Xaa Arg Xaa Arg Xaa Arg Xaa Arg
1 5 10

<210> 46
<211> 13
<212> PRT
<213> Artificial Sequence

<220>
<223> delivery enhancing transporter moiety

<221> MOD_RES
<222> (2)...(3)
<223> Xaa = Gly, beta-alanine, gamma-amino butyric acid
      or epsilon-amino caproic acid

<221> MOD_RES
<222> (5)...(6)
<223> Xaa = Gly, beta-alanine, gamma-amino butyric acid
      or epsilon-amino caproic acid

<221> MOD_RES
<222> (8)...(9)
<223> Xaa = Gly, beta-alanine, gamma-amino butyric acid
      or epsilon-amino caproic acid

<221> MOD_RES
<222> (11)...(12)
<223> Xaa = Gly, beta-alanine, gamma-amino butyric acid
      or epsilon-amino caproic acid

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<400> 46
Arg Xaa Xaa Arg Xaa Xaa Arg Xaa Xaa Arg Xaa Xaa Arg
1           5           10

<210> 47
<211> 16
<212> PRT
<213> Artificial Sequence

<220>
<223> delivery enhancing transporter moiety

<221> MOD_RES
<222> (2)...(3)
<223> Xaa = Gly, beta-alanine, gamma-amino butyric acid
      or epsilon-amino caproic acid

<221> MOD_RES
<222> (5)...(6)
<223> Xaa = Gly, beta-alanine, gamma-amino butyric acid
      or epsilon-amino caproic acid

<221> MOD_RES
<222> (8)...(9)
<223> Xaa = Gly, beta-alanine, gamma-amino butyric acid
      or epsilon-amino caproic acid

<221> MOD_RES
<222> (11)...(12)
<223> Xaa = Gly, beta-alanine, gamma-amino butyric acid
      or epsilon-amino caproic acid

<221> MOD_RES
<222> (14)...(15)
<223> Xaa = Gly, beta-alanine, gamma-amino butyric acid
      or epsilon-amino caproic acid

<400> 47
Arg Xaa Xaa Arg Xaa Xaa Arg Xaa Xaa Arg Xaa Xaa Arg
1           5           10           15

<210> 48
<211> 19
<212> PRT
<213> Artificial Sequence

<220>
<223> delivery enhancing transporter moiety

<221> MOD_RES
<222> (2)...(3)
<223> Xaa = Gly, beta-alanine, gamma-amino butyric acid
      or epsilon-amino caproic acid

<221> MOD_RES
<222> (5)...(6)
<223> Xaa = Gly, beta-alanine, gamma-amino butyric acid
      or epsilon-amino caproic acid

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<221> MOD_RES
<222> (8)...(9)
<223> Xaa = Gly, beta-alanine, gamma-amino butyric acid
      or epsilon-amino caproic acid

<221> MOD_RES
<222> (11)...(12)
<223> Xaa = Gly, beta-alanine, gamma-amino butyric acid
      or epsilon-amino caproic acid

<221> MOD_RES
<222> (14)...(15)
<223> Xaa = Gly, beta-alanine, gamma-amino butyric acid
      or epsilon-amino caproic acid

<221> MOD_RES
<222> (17)...(18)
<223> Xaa = Gly, beta-alanine, gamma-amino butyric acid
      or epsilon-amino caproic acid

<400> 48
Arg Xaa Xaa Arg
  1           5           10          15
Xaa Xaa Arg

<210> 49
<211> 22
<212> PRT
<213> Artificial Sequence

<220>
<223> delivery enhancing transporter moiety

<221> MOD_RES
<222> (2)...(3)
<223> Xaa = Gly, beta-alanine, gamma-amino butyric acid
      or epsilon-amino caproic acid

<221> MOD_RES
<222> (5)...(6)
<223> Xaa = Gly, beta-alanine, gamma-amino butyric acid
      or epsilon-amino caproic acid

<221> MOD_RES
<222> (8)...(9)
<223> Xaa = Gly, beta-alanine, gamma-amino butyric acid
      or epsilon-amino caproic acid

<221> MOD_RES
<222> (11)...(12)
<223> Xaa = Gly, beta-alanine, gamma-amino butyric acid
      or epsilon-amino caproic acid

<221> MOD_RES
<222> (14)...(15)
<223> Xaa = Gly, beta-alanine, gamma-amino butyric acid
      or epsilon-amino caproic acid

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<221> MOD_RES
<222> (17)...(18)
<223> Xaa = Gly, beta-alanine, gamma-amino butyric acid
      or epsilon-amino caproic acid

<221> MOD_RES
<222> (20)...(21)
<223> Xaa = Gly, beta-alanine, gamma-amino butyric acid
      or epsilon-amino caproic acid

<400> 49
Arg Xaa Xaa Arg
  1           5           10          15
Xaa Xaa Arg Xaa Xaa Arg
  20

<210> 50
<211> 25
<212> PRT
<213> Artificial Sequence

<220>
<223> delivery enhancing transporter moiety

<221> MOD_RES
<222> (2)...(3)
<223> Xaa = Gly, beta-alanine, gamma-amino butyric acid
      or epsilon-amino caproic acid

<221> MOD_RES
<222> (5)...(6)
<223> Xaa = Gly, beta-alanine, gamma-amino butyric acid
      or epsilon-amino caproic acid

<221> MOD_RES
<222> (8)...(9)
<223> Xaa = Gly, beta-alanine, gamma-amino butyric acid
      or epsilon-amino caproic acid

<221> MOD_RES
<222> (11)...(12)
<223> Xaa = Gly, beta-alanine, gamma-amino butyric acid
      or epsilon-amino caproic acid

<221> MOD_RES
<222> (14)...(15)
<223> Xaa = Gly, beta-alanine, gamma-amino butyric acid
      or epsilon-amino caproic acid

<221> MOD_RES
<222> (17)...(18)
<223> Xaa = Gly, beta-alanine, gamma-amino butyric acid
      or epsilon-amino caproic acid

<221> MOD_RES
<222> (20)...(21)
<223> Xaa = Gly, beta-alanine, gamma-amino butyric acid
      or epsilon-amino caproic acid

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<221> MOD_RES
<222> (23)...(24)
<223> Xaa = Gly, beta-alanine, gamma-amino butyric acid
      or epsilon-amino caproic acid

<400> 50
Arg Xaa Xaa Arg
    1           5           10          15
Xaa Xaa Arg Xaa Xaa Arg Xaa Xaa Arg
    20          25

<210> 51
<211> 28
<212> PRT
<213> Artificial Sequence

<220>
<223> delivery enhancing transporter moiety

<221> MOD_RES
<222> (2)...(3)
<223> Xaa = Gly, beta-alanine, gamma-amino butyric acid
      or epsilon-amino caproic acid

<221> MOD_RES
<222> (5)...(6)
<223> Xaa = Gly, beta-alanine, gamma-amino butyric acid
      or epsilon-amino caproic acid

<221> MOD_RES
<222> (8)...(9)
<223> Xaa = Gly, beta-alanine, gamma-amino butyric acid
      or epsilon-amino caproic acid

<221> MOD_RES
<222> (11)...(12)
<223> Xaa = Gly, beta-alanine, gamma-amino butyric acid
      or epsilon-amino caproic acid

<221> MOD_RES
<222> (14)...(15)
<223> Xaa = Gly, beta-alanine, gamma-amino butyric acid
      or epsilon-amino caproic acid

<221> MOD_RES
<222> (17)...(18)
<223> Xaa = Gly, beta-alanine, gamma-amino butyric acid
      or epsilon-amino caproic acid

<221> MOD_RES
<222> (20)...(21)
<223> Xaa = Gly, beta-alanine, gamma-amino butyric acid
      or epsilon-amino caproic acid

<221> MOD_RES
<222> (23)...(24)
<223> Xaa = Gly, beta-alanine, gamma-amino butyric acid
      or epsilon-amino caproic acid

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<221> MOD_RES
<222> (26)...(27)
<223> Xaa = Gly, beta-alanine, gamma-amino butyric acid
      or epsilon-amino caproic acid

<400> 51
Arg Xaa Xaa Arg
   1          5          10         15
Xaa Xaa Arg Xaa Xaa Arg Xaa Xaa Arg Xaa Xaa Arg
   20         25

<210> 52
<211> 31
<212> PRT
<213> Artificial Sequence

<220>
<223> delivery enhancing transporter moiety

<221> MOD_RES
<222> (2)...(3)
<223> Xaa = Gly, beta-alanine, gamma-amino butyric acid
      or epsilon-amino caproic acid

<221> MOD_RES
<222> (5)...(6)
<223> Xaa = Gly, beta-alanine, gamma-amino butyric acid
      or epsilon-amino caproic acid

<221> MOD_RES
<222> (8)...(9)
<223> Xaa = Gly, beta-alanine, gamma-amino butyric acid
      or epsilon-amino caproic acid

<221> MOD_RES
<222> (11)...(12)
<223> Xaa = Gly, beta-alanine, gamma-amino butyric acid
      or epsilon-amino caproic acid

<221> MOD_RES
<222> (14)...(15)
<223> Xaa = Gly, beta-alanine, gamma-amino butyric acid
      or epsilon-amino caproic acid

<221> MOD_RES
<222> (17)...(18)
<223> Xaa = Gly, beta-alanine, gamma-amino butyric acid
      or epsilon-amino caproic acid

<221> MOD_RES
<222> (20)...(21)
<223> Xaa = Gly, beta-alanine, gamma-amino butyric acid
      or epsilon-amino caproic acid

<221> MOD_RES
<222> (23)...(24)
<223> Xaa = Gly, beta-alanine, gamma-amino butyric acid
      or epsilon-amino caproic acid

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<221> MOD_RES
<222> (26)...(27)
<223> Xaa = Gly, beta-alanine, gamma-amino butyric acid
      or epsilon-amino caproic acid

<221> MOD_RES
<222> (29)...(30)
<223> Xaa = Gly, beta-alanine, gamma-amino butyric acid
      or epsilon-amino caproic acid

      <400> 52
Arg Xaa Xaa Arg
      1           5           10          15
Xaa Xaa Arg Xaa Xaa Arg Xaa Xaa Arg Xaa Xaa Arg Xaa Xaa Arg
      20          25          30

      <210> 53
      <211> 19
      <212> PRT
      <213> Artificial Sequence

      <220>
      <223> delivery enhancing transporter moiety

      <221> MOD_RES
      <222> (2)...(3)
      <223> Xaa = Gly or epsilon-amino caproic acid

      <221> MOD_RES
      <222> (5)...(6)
      <223> Xaa = Gly or epsilon-amino caproic acid

      <221> MOD_RES
      <222> (8)...(9)
      <223> Xaa = Gly or epsilon-amino caproic acid

      <221> MOD_RES
      <222> (11)...(12)
      <223> Xaa = Gly or epsilon-amino caproic acid

      <221> MOD_RES
      <222> (14)...(15)
      <223> Xaa = Gly or epsilon-amino caproic acid

      <221> MOD_RES
      <222> (17)...(18)
      <223> Xaa = Gly or epsilon-amino caproic acid

      <400> 53
Arg Xaa Xaa Arg
      1           5           10          15
Xaa Xaa Arg

      <210> 54
      <211> 17
      <212> PRT
      <213> Artificial Sequence

      <220>
      <223> delivery enhancing transporter moiety

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<221> MOD_RES
<222> (2)...(4)
<223> Xaa = Gly, beta-alanine, gamma-amino butyric acid
      or epsilon-amino caproic acid

<221> MOD_RES
<222> (6)...(8)
<223> Xaa = Gly, beta-alanine, gamma-amino butyric acid
      or epsilon-amino caproic acid

<221> MOD_RES
<222> (10)...(12)
<223> Xaa = Gly, beta-alanine, gamma-amino butyric acid
      or epsilon-amino caproic acid

<221> MOD_RES
<222> (14)...(16)
<223> Xaa = Gly, beta-alanine, gamma-amino butyric acid
      or epsilon-amino caproic acid

<400> 54
Arg Xaa Xaa Xaa Arg Xaa Xaa Xaa Arg Xaa Xaa Xaa Arg Xaa Xaa Xaa
    1           5           10          15
Arg

<210> 55
<211> 21
<212> PRT
<213> Artificial Sequence

<220>
<223> delivery enhancing transporter moiety

<221> MOD_RES
<222> (2)...(4)
<223> Xaa = Gly, beta-alanine, gamma-amino butyric acid
      or epsilon-amino caproic acid

<221> MOD_RES
<222> (6)...(8)
<223> Xaa = Gly, beta-alanine, gamma-amino butyric acid
      or epsilon-amino caproic acid

<221> MOD_RES
<222> (10)...(12)
<223> Xaa = Gly, beta-alanine, gamma-amino butyric acid
      or epsilon-amino caproic acid

<221> MOD_RES
<222> (14)...(16)
<223> Xaa = Gly, beta-alanine, gamma-amino butyric acid
      or epsilon-amino caproic acid

<221> MOD_RES
<222> (18)...(20)
<223> Xaa = Gly, beta-alanine, gamma-amino butyric acid
      or epsilon-amino caproic acid

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<400> 55
Arg Xaa Xaa Xaa Arg Xaa Xaa Xaa Arg Xaa Xaa Xaa Arg Xaa Xaa Xaa
1          5          10          15
Arg Xaa Xaa Xaa Arg
20

<210> 56
<211> 25
<212> PRT
<213> Artificial Sequence

<220>
<223> delivery enhancing transporter moiety

<221> MOD_RES
<222> (2)...(4)
<223> Xaa = Gly, beta-alanine, gamma-amino butyric acid
      or epsilon-amino caproic acid

<221> MOD_RES
<222> (6)...(8)
<223> Xaa = Gly, beta-alanine, gamma-amino butyric acid
      or epsilon-amino caproic acid

<221> MOD_RES
<222> (10)...(12)
<223> Xaa = Gly, beta-alanine, gamma-amino butyric acid
      or epsilon-amino caproic acid

<221> MOD_RES
<222> (14)...(16)
<223> Xaa = Gly, beta-alanine, gamma-amino butyric acid
      or epsilon-amino caproic acid

<221> MOD_RES
<222> (18)...(20)
<223> Xaa = Gly, beta-alanine, gamma-amino butyric acid
      or epsilon-amino caproic acid

<221> MOD_RES
<222> (22)...(24)
<223> Xaa = Gly, beta-alanine, gamma-amino butyric acid
      or epsilon-amino caproic acid

<400> 56
Arg Xaa Xaa Xaa Arg Xaa Xaa Xaa Arg Xaa Xaa Xaa Arg Xaa Xaa Xaa
1          5          10          15
Arg Xaa Xaa Xaa Arg Xaa Xaa Xaa Arg
20          25

<210> 57
<211> 29
<212> PRT
<213> Artificial Sequence

<220>
<223> delivery enhancing transporter moiety

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<221> MOD_RES
<222> (2)...(4)
<223> Xaa = Gly, beta-alanine, gamma-amino butyric acid
      or epsilon-amino caproic acid

<221> MOD_RES
<222> (6)...(8)
<223> Xaa = Gly, beta-alanine, gamma-amino butyric acid
      or epsilon-amino caproic acid

<221> MOD_RES
<222> (10)...(12)
<223> Xaa = Gly, beta-alanine, gamma-amino butyric acid
      or epsilon-amino caproic acid

<221> MOD_RES
<222> (14)...(16)
<223> Xaa = Gly, beta-alanine, gamma-amino butyric acid
      or epsilon-amino caproic acid

<221> MOD_RES
<222> (18)...(20)
<223> Xaa = Gly, beta-alanine, gamma-amino butyric acid
      or epsilon-amino caproic acid

<221> MOD_RES
<222> (22)...(24)
<223> Xaa = Gly, beta-alanine, gamma-amino butyric acid
      or epsilon-amino caproic acid

<221> MOD_RES
<222> (26)...(28)
<223> Xaa = Gly, beta-alanine, gamma-amino butyric acid
      or epsilon-amino caproic acid

<400> 57
Arg Xaa Xaa Xaa Arg Xaa Xaa Xaa Arg Xaa Xaa Xaa Arg Xaa Xaa Xaa
  1           5           10          15
Arg Xaa Xaa Xaa Arg Xaa Xaa Xaa Arg Xaa Xaa Xaa Arg
  20          25

<210> 58
<211> 33
<212> PRT
<213> Artificial Sequence

<220>
<223> delivery enhancing transporter moiety

<221> MOD_RES
<222> (2)...(4)
<223> Xaa = Gly, beta-alanine, gamma-amino butyric acid
      or epsilon-amino caproic acid

<221> MOD_RES
<222> (6)...(8)
<223> Xaa = Gly, beta-alanine, gamma-amino butyric acid
      or epsilon-amino caproic acid

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<221> MOD_RES
<222> (10)...(12)
<223> Xaa = Gly, beta-alanine, gamma-amino butyric acid
      or epsilon-amino caproic acid

<221> MOD_RES
<222> (14)...(16)
<223> Xaa = Gly, beta-alanine, gamma-amino butyric acid
      or epsilon-amino caproic acid

<221> MOD_RES
<222> (18)...(20)
<223> Xaa = Gly, beta-alanine, gamma-amino butyric acid
      or epsilon-amino caproic acid

<221> MOD_RES
<222> (22)...(24)
<223> Xaa = Gly, beta-alanine, gamma-amino butyric acid
      or epsilon-amino caproic acid

<221> MOD_RES
<222> (26)...(28)
<223> Xaa = Gly, beta-alanine, gamma-amino butyric acid
      or epsilon-amino caproic acid

<221> MOD_RES
<222> (30)...(32)
<223> Xaa = Gly, beta-alanine, gamma-amino butyric acid
      or epsilon-amino caproic acid

      <400> 58
Arg Xaa Xaa Xaa Arg Xaa Xaa Xaa Arg Xaa Xaa Xaa Arg Xaa Xaa Xaa
    1           5           10          15
Arg Xaa Xaa Xaa Arg Xaa Xaa Xaa Arg Xaa Xaa Xaa Arg Xaa Xaa Xaa
    20          25          30
Arg

      <210> 59
      <211> 37
      <212> PRT
      <213> Artificial Sequence

      <220>
      <223> delivery enhancing transporter moiety

      <221> MOD_RES
      <222> (2)...(4)
      <223> Xaa = Gly, beta-alanine, gamma-amino butyric acid
            or epsilon-amino caproic acid

      <221> MOD_RES
      <222> (6)...(8)
      <223> Xaa = Gly, beta-alanine, gamma-amino butyric acid
            or epsilon-amino caproic acid

      <221> MOD_RES
      <222> (10)...(12)
      <223> Xaa = Gly, beta-alanine, gamma-amino butyric acid
            or epsilon-amino caproic acid

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<221> MOD_RES
<222> (14)...(16)
<223> Xaa = Gly, beta-alanine, gamma-amino butyric acid
      or epsilon-amino caproic acid

<221> MOD_RES
<222> (18)...(20)
<223> Xaa = Gly, beta-alanine, gamma-amino butyric acid
      or epsilon-amino caproic acid

<221> MOD_RES
<222> (22)...(24)
<223> Xaa = Gly, beta-alanine, gamma-amino butyric acid
      or epsilon-amino caproic acid

<221> MOD_RES
<222> (26)...(28)
<223> Xaa = Gly, beta-alanine, gamma-amino butyric acid
      or epsilon-amino caproic acid

<221> MOD_RES
<222> (30)...(32)
<223> Xaa = Gly, beta-alanine, gamma-amino butyric acid
      or epsilon-amino caproic acid

<221> MOD_RES
<222> (34)...(36)
<223> Xaa = Gly, beta-alanine, gamma-amino butyric acid
      or epsilon-amino caproic acid

<400> 59
Arg Xaa Xaa Xaa Arg Xaa Xaa Xaa Arg Xaa Xaa Xaa Arg Xaa Xaa Xaa
    1           5           10          15
Arg Xaa Xaa Xaa Arg Xaa Xaa Xaa Arg Xaa Xaa Xaa Arg Xaa Xaa Xaa
    20          25          30
Arg Xaa Xaa Xaa Arg
    35

<210> 60
<211> 41
<212> PRT
<213> Artificial Sequence

<220>
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<221> MOD_RES
<222> (2)...(4)
<223> Xaa = Gly, beta-alanine, gamma-amino butyric acid
      or epsilon-amino caproic acid

<221> MOD_RES
<222> (6)...(8)
<223> Xaa = Gly, beta-alanine, gamma-amino butyric acid
      or epsilon-amino caproic acid

<221> MOD_RES
<222> (10)...(12)
<223> Xaa = Gly, beta-alanine, gamma-amino butyric acid
      or epsilon-amino caproic acid

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<221> MOD_RES
<222> (14)...(16)
<223> Xaa = Gly, beta-alanine, gamma-amino butyric acid
      or epsilon-amino caproic acid

<221> MOD_RES
<222> (18)...(20)
<223> Xaa = Gly, beta-alanine, gamma-amino butyric acid
      or epsilon-amino caproic acid

<221> MOD_RES
<222> (22)...(24)
<223> Xaa = Gly, beta-alanine, gamma-amino butyric acid
      or epsilon-amino caproic acid

<221> MOD_RES
<222> (26)...(28)
<223> Xaa = Gly, beta-alanine, gamma-amino butyric acid
      or epsilon-amino caproic acid

<221> MOD_RES
<222> (30)...(32)
<223> Xaa = Gly, beta-alanine, gamma-amino butyric acid
      or epsilon-amino caproic acid

<221> MOD_RES
<222> (34)...(36)
<223> Xaa = Gly, beta-alanine, gamma-amino butyric acid
      or epsilon-amino caproic acid

<221> MOD_RES
<222> (38)...(40)
<223> Xaa = Gly, beta-alanine, gamma-amino butyric acid
      or epsilon-amino caproic acid

<400> 60
Arg Xaa Xaa Xaa Arg Xaa Xaa Xaa Arg Xaa Xaa Xaa Arg Xaa Xaa Xaa
  1           5           10          15
Arg Xaa Xaa Xaa Arg Xaa Xaa Xaa Arg Xaa Xaa Xaa Arg Xaa Xaa Xaa
  20          25          30
Arg Xaa Xaa Xaa Arg Xaa Xaa Xaa Arg
  35          40

<210> 61
<211> 25
<212> PRT
<213> Artificial Sequence

<220>
<223> delivery enhancing transporter moiety

<400> 61
Arg Gly Gly Gly Arg Gly Gly Arg Gly Gly Arg Gly Gly Gly
  1           5           10          15
Arg Gly Gly Gly Arg Gly Gly Arg
  20          25

<210> 62
<211> 33
<212> PRT
<213> Artificial Sequence

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<220>
<223> delivery enhancing transporter moiety

<221> MOD_RES
<222> (1)...(10)
<223> Xaa = any natural or non-natural amino acid, Xaa
      at positions 1-10 may be present or absent

<221> MOD_RES
<222> (12)...(13)
<223> Xaa = Gly, beta-alanine, gamma-amino butyric acid
      or epsilon-amino caproic acid

<221> MOD_RES
<222> (15)...(16)
<223> Xaa = Gly, beta-alanine, gamma-amino butyric acid
      or epsilon-amino caproic acid

<221> MOD_RES
<222> (18)...(19)
<223> Xaa = Gly, beta-alanine, gamma-amino butyric acid
      or epsilon-amino caproic acid

<221> MOD_RES
<222> (21)...(22)
<223> Xaa = Gly, beta-alanine, gamma-amino butyric acid
      or epsilon-amino caproic acid

<221> MOD_RES
<222> (24)...(33)
<223> Xaa = any natural or non-natural amino acid, Xaa
      at positions 24-33 may be present or absent

<400> 62
Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Arg Xaa Xaa Arg Xaa Xaa
  1           5           10          15
Arg Xaa Xaa Arg Xaa Xaa Arg Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
  20          25          30
Xaa

<210> 63
<211> 36
<212> PRT
<213> Artificial Sequence

<220>
<223> delivery enhancing transporter moiety

<221> MOD_RES
<222> (1)...(10)
<223> Xaa = any natural or non-natural amino acid, Xaa
      at positions 1-10 may be present or absent

<221> MOD_RES
<222> (12)...(13)
<223> Xaa = Gly, beta-alanine, gamma-amino butyric acid
      or epsilon-amino caproic acid

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<221> MOD_RES
<222> (15)...(16)
<223> Xaa = Gly, beta-alanine, gamma-amino butyric acid
      or epsilon-amino caproic acid

<221> MOD_RES
<222> (18)...(19)
<223> Xaa = Gly, beta-alanine, gamma-amino butyric acid
      or epsilon-amino caproic acid

<221> MOD_RES
<222> (21)...(22)
<223> Xaa = Gly, beta-alanine, gamma-amino butyric acid
      or epsilon-amino caproic acid

<221> MOD_RES
<222> (24)...(25)
<223> Xaa = Gly, beta-alanine, gamma-amino butyric acid
      or epsilon-amino caproic acid

<221> MOD_RES
<222> (27)...(36)
<223> Xaa = any natural or non-natural amino acid, Xaa
      at positions 27-36 may be present or absent

<400> 63
Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Arg Xaa Xaa Arg Xaa Xaa
  1           5           10          15
Arg Xaa Xaa Arg Xaa Xaa Arg Xaa Xaa Arg Xaa Xaa Xaa Xaa Xaa Xaa
  20          25          30
Xaa Xaa Xaa Xaa
  35

<210> 64
<211> 39
<212> PRT
<213> Artificial Sequence

<220>
<223> delivery enhancing transporter moiety

<221> MOD_RES
<222> (1)...(10)
<223> Xaa = any natural or non-natural amino acid, Xaa
      at positions 1-10 may be present or absent

<221> MOD_RES
<222> (12)...(13)
<223> Xaa = Gly, beta-alanine, gamma-amino butyric acid
      or epsilon-amino caproic acid

<221> MOD_RES
<222> (15)...(16)
<223> Xaa = Gly, beta-alanine, gamma-amino butyric acid
      or epsilon-amino caproic acid

<221> MOD_RES
<222> (18)...(19)
<223> Xaa = Gly, beta-alanine, gamma-amino butyric acid
      or epsilon-amino caproic acid

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<221> MOD_RES
<222> (21)...(22)
<223> Xaa = Gly, beta-alanine, gamma-amino butyric acid
      or epsilon-amino caproic acid

<221> MOD_RES
<222> (24)...(25)
<223> Xaa = Gly, beta-alanine, gamma-amino butyric acid
      or epsilon-amino caproic acid

<221> MOD_RES
<222> (27)...(28)
<223> Xaa = Gly, beta-alanine, gamma-amino butyric acid
      or epsilon-amino caproic acid

<221> MOD_RES
<222> (30)...(39)
<223> Xaa = any natural or non-natural amino acid, Xaa
      at positions 30-39 may be present or absent

<400> 64
Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Arg Xaa Xaa Arg Xaa Xaa
  1           5           10          15
Arg Xaa Xaa Xaa
  20          25          30
Xaa Xaa Xaa Xaa Xaa Xaa
  35

<210> 65
<211> 42
<212> PRT
<213> Artificial Sequence

<220>
<223> delivery enhancing transporter moiety

<221> MOD_RES
<222> (1)...(10)
<223> Xaa = any natural or non-natural amino acid, Xaa
      at positions 1-10 may be present or absent

<221> MOD_RES
<222> (12)...(13)
<223> Xaa = Gly, beta-alanine, gamma-amino butyric acid
      or epsilon-amino caproic acid

<221> MOD_RES
<222> (15)...(16)
<223> Xaa = Gly, beta-alanine, gamma-amino butyric acid
      or epsilon-amino caproic acid

<221> MOD_RES
<222> (18)...(19)
<223> Xaa = Gly, beta-alanine, gamma-amino butyric acid
      or epsilon-amino caproic acid

<221> MOD_RES
<222> (21)...(22)
<223> Xaa = Gly, beta-alanine, gamma-amino butyric acid
      or epsilon-amino caproic acid

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<221> MOD_RES
<222> (24)...(25)
<223> Xaa = Gly, beta-alanine, gamma-amino butyric acid
      or epsilon-amino caproic acid

<221> MOD_RES
<222> (27)...(28)
<223> Xaa = Gly, beta-alanine, gamma-amino butyric acid
      or epsilon-amino caproic acid

<221> MOD_RES
<222> (30)...(31)
<223> Xaa = Gly, beta-alanine, gamma-amino butyric acid
      or epsilon-amino caproic acid

<221> MOD_RES
<222> (33)...(42)
<223> Xaa = any natural or non-natural amino acid, Xaa
      at positions 33-42 may be present or absent

<400> 65
Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Arg Xaa Xaa Arg Xaa Xaa
  1           5           10          15
Arg Xaa Xaa Arg
  20          25          30
Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
  35          40

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<210> 66
<211> 45
<212> PRT
<213> Artificial Sequence

<220>
<223> delivery enhancing transporter moiety

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<221> MOD_RES
<222> (1)...(10)
<223> Xaa = any natural or non-natural amino acid, Xaa
      at positions 1-10 may be present or absent

<221> MOD_RES
<222> (12)...(13)
<223> Xaa = Gly, beta-alanine, gamma-amino butyric acid
      or epsilon-amino caproic acid

<221> MOD_RES
<222> (15)...(16)
<223> Xaa = Gly, beta-alanine, gamma-amino butyric acid
      or epsilon-amino caproic acid

<221> MOD_RES
<222> (18)...(19)
<223> Xaa = Gly, beta-alanine, gamma-amino butyric acid
      or epsilon-amino caproic acid

<221> MOD_RES
<222> (21)...(22)
<223> Xaa = Gly, beta-alanine, gamma-amino butyric acid
      or epsilon-amino caproic acid

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<221> MOD_RES
<222> (24)...(25)
<223> Xaa = Gly, beta-alanine, gamma-amino butyric acid
      or epsilon-amino caproic acid

<221> MOD_RES
<222> (27)...(28)
<223> Xaa = Gly, beta-alanine, gamma-amino butyric acid
      or epsilon-amino caproic acid

<221> MOD_RES
<222> (30)...(31)
<223> Xaa = Gly, beta-alanine, gamma-amino butyric acid
      or epsilon-amino caproic acid

<221> MOD_RES
<222> (33)...(34)
<223> Xaa = Gly, beta-alanine, gamma-amino butyric acid
      or epsilon-amino caproic acid

<221> MOD_RES
<222> (36)...(45)
<223> Xaa = any natural or non-natural amino acid, Xaa
      at positions 36-45 may be present or absent

<400> 66
Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Arg Xaa Xaa Arg Xaa Xaa
  1           5           10          15
Arg Xaa Xaa Arg
  20          25          30
Xaa Xaa Arg Xaa Xaa
  35          40          45

<210> 67
<211> 48
<212> PRT
<213> Artificial Sequence

<220>
<223> delivery enhancing transporter moiety

<221> MOD_RES
<222> (1)...(10)
<223> Xaa = any natural or non-natural amino acid, Xaa
      at positions 1-10 may be present or absent

<221> MOD_RES
<222> (12)...(13)
<223> Xaa = Gly, beta-alanine, gamma-amino butyric acid
      or epsilon-amino caproic acid

<221> MOD_RES
<222> (15)...(16)
<223> Xaa = Gly, beta-alanine, gamma-amino butyric acid
      or epsilon-amino caproic acid

<221> MOD_RES
<222> (18)...(19)
<223> Xaa = Gly, beta-alanine, gamma-amino butyric acid
      or epsilon-amino caproic acid

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<221> MOD_RES
<222> (21)...(22)
<223> Xaa = Gly, beta-alanine, gamma-amino butyric acid
      or epsilon-amino caproic acid

<221> MOD_RES
<222> (24)...(25)
<223> Xaa = Gly, beta-alanine, gamma-amino butyric acid
      or epsilon-amino caproic acid

<221> MOD_RES
<222> (27)...(28)
<223> Xaa = Gly, beta-alanine, gamma-amino butyric acid
      or epsilon-amino caproic acid

<221> MOD_RES
<222> (30)...(31)
<223> Xaa = Gly, beta-alanine, gamma-amino butyric acid
      or epsilon-amino caproic acid

<221> MOD_RES
<222> (33)...(34)
<223> Xaa = Gly, beta-alanine, gamma-amino butyric acid
      or epsilon-amino caproic acid

<221> MOD_RES
<222> (36)...(37)
<223> Xaa = Gly, beta-alanine, gamma-amino butyric acid
      or epsilon-amino caproic acid

<221> MOD_RES
<222> (39)...(48)
<223> Xaa = any natural or non-natural amino acid, Xaa
      at positions 39-48 may be present or absent

<400> 67
Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Arg Xaa Xaa Arg Xaa Xaa
    1           5           10          15
Arg Xaa Xaa Arg
    20          25          30
Xaa Xaa Arg Xaa Xaa Arg Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
    35          40          45

<210> 68
<211> 51
<212> PRT
<213> Artificial Sequence

<220>
<223> delivery enhancing transporter moiety

<221> MOD_RES
<222> (1)...(10)
<223> Xaa = any natural or non-natural amino acid, Xaa
      at positions 1-10 may be present or absent

<221> MOD_RES
<222> (12)...(13)
<223> Xaa = Gly, beta-alanine, gamma-amino butyric acid
      or epsilon-amino caproic acid

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```

<221> MOD_RES
<222> (15)...(16)
<223> Xaa = Gly, beta-alanine, gamma-amino butyric acid
      or epsilon-amino caproic acid

<221> MOD_RES
<222> (18)...(19)
<223> Xaa = Gly, beta-alanine, gamma-amino butyric acid
      or epsilon-amino caproic acid

<221> MOD_RES
<222> (21)...(22)
<223> Xaa = Gly, beta-alanine, gamma-amino butyric acid
      or epsilon-amino caproic acid

<221> MOD_RES
<222> (24)...(25)
<223> Xaa = Gly, beta-alanine, gamma-amino butyric acid
      or epsilon-amino caproic acid

<221> MOD_RES
<222> (27)...(28)
<223> Xaa = Gly, beta-alanine, gamma-amino butyric acid
      or epsilon-amino caproic acid

<221> MOD_RES
<222> (30)...(31)
<223> Xaa = Gly, beta-alanine, gamma-amino butyric acid
      or epsilon-amino caproic acid

<221> MOD_RES
<222> (33)...(34)
<223> Xaa = Gly, beta-alanine, gamma-amino butyric acid
      or epsilon-amino caproic acid

<221> MOD_RES
<222> (36)...(37)
<223> Xaa = Gly, beta-alanine, gamma-amino butyric acid
      or epsilon-amino caproic acid

<221> MOD_RES
<222> (39)...(40)
<223> Xaa = Gly, beta-alanine, gamma-amino butyric acid
      or epsilon-amino caproic acid

<221> MOD_RES
<222> (42)...(51)
<223> Xaa = any natural or non-natural amino acid, Xaa
      at positions 42-51 may be present or absent

        <400> 68
Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Arg Xaa Xaa Arg Xaa Xaa
      1           5           10          15
Arg Xaa Xaa Arg
      20          25          30
Xaa Xaa Arg Xaa Xaa Arg Xaa Xaa Arg Xaa Xaa Xaa Xaa Xaa Xaa Xaa
      35          40          45
Xaa Xaa Xaa
      50

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<210> 69
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> delivery enhancing transporter moiety

<221> MOD_RES
<222> (1)...(1)
<223> Xaa = N-acetyl cysteine

<221> MOD_RES
<222> (2)...(2)
<223> Xaa = aminocaproic acid

<221> MOD_RES
<222> (10)...(10)
<223> Xaa = argininamide

<400> 69
Xaa Xaa Arg Arg Arg Arg Arg Arg Arg Xaa
1 5 10

<210> 70
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> delivery enhancing transporter moiety conjugate

<221> MOD_RES
<222> (1)...(1)
<223> Xaa = copper-diethylenetriaminepentaacetic acid
complex (Cu-DTPA) linked to aminocaproic acid
(aca)

<221> MOD_RES
<222> (8)...(8)
<223> Xaa = Arg bound to peptide synthesizer solid-phase
resin

<400> 70
Xaa Arg Arg Arg Arg Arg Arg Xaa
1 5

<210> 71
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> delivery enhancing transporter moiety conjugate

<221> MOD_RES
<222> (1)...(1)
<223> Xaa = diethylenetriaminepentaacetic acid (DTPA)
linked to aminocaproic acid (aca)

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<400> 71
Xaa Arg Arg Arg Arg Arg Arg Arg Arg
1 5

<210> 72
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> delivery enhancing transporter moiety conjugate

<221> MOD_RES
<222> (1)...(1)
<223> Xaa = copper-diethylenetriaminepentaacetic acid
      complex (Cu-DTPA) linked to aminocaproic acid
      (aca)

<400> 72
Xaa Arg Arg Arg Arg Arg Arg Arg Arg
1 5

<210> 73
<211> 11
<212> PRT
<213> Artificial Sequence

<220>
<223> delivery enhancing transporter moiety conjugate

<221> MOD_RES
<222> (1)...(1)
<223> Xaa = biotinylated aminocaproic acid (aca)

<221> MOD_RES
<222> (11)...(11)
<223> Xaa = cysteinamide conjugated to hydrocortisone

<400> 73
Xaa Arg Arg Arg Arg Arg Arg Arg Ala Ala Xaa
1 5 10

<210> 74
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<223> delivery enhancing transporter moiety conjugate

<221> MOD_RES
<222> (1)...(1)
<223> Xaa = Arg conjugated to benzyl (Bz) and acetyl
      (Ac) protected C-2' derivative of taxol through
      benzyl-(para-hydroxy benzoate) carbonate

<400> 74
Xaa Arg Arg Arg Arg Arg Arg
1 5

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```

<210> 75
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<223> delivery enhancing transporter moiety conjugate

<221> MOD_RES
<222> (1)...(1)
<223> Xaa = Arg conjugated to benzyl (Bz) and acetyl
      (Ac) protected C-2' derivative of taxol through
      benzyl-(para-hydroxy benzoate) carbamate

<400> 75
Xaa Arg Arg Arg Arg Arg Arg
1           5

<210> 76
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<223> delivery enhancing transporter moiety conjugate

<221> MOD_RES
<222> (1)...(1)
<223> Xaa = fluorescein isothiocyanate (FITC) labeled
      aminocaproic acid (aca)

<221> MOD_RES
<222> (6)...(6)
<223> Xaa = argininamide

<400> 76
Xaa Arg Arg Arg Arg Xaa
1           5

<210> 77
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<223> delivery enhancing transporter moiety conjugate

<221> MOD_RES
<222> (1)...(1)
<223> Xaa = fluorescein isothiocyanate (FITC) labeled
      aminocaproic acid (aca)

<221> MOD_RES
<222> (7)...(7)
<223> Xaa = argininamide

<400> 77
Xaa Arg Arg Arg Arg Arg Xaa
1           5

```

```

<210> 78
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> delivery enhancing transporter moiety conjugate

<221> MOD_RES
<222> (1)...(1)
<223> Xaa = fluorescein isothiocyanate (FITC) labeled
      aminocaproic acid (aca)

<221> MOD_RES
<222> (8)...(8)
<223> Xaa = argininamide

<400> 78
Xaa Arg Arg Arg Arg Arg Arg Xaa
1           5

<210> 79
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> delivery enhancing transporter moiety conjugate

<221> MOD_RES
<222> (1)...(1)
<223> Xaa = fluorescein isothiocyanate (FITC) labeled
      aminocaproic acid (aca)

<221> MOD_RES
<222> (9)...(9)
<223> Xaa = argininamide

<400> 79
Xaa Arg Arg Arg Arg Arg Arg Xaa
1           5

<210> 80
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> delivery enhancing transporter moiety conjugate

<221> MOD_RES
<222> (1)...(1)
<223> Xaa = fluorescein isothiocyanate (FITC) labeled
      aminocaproic acid (aca)

<221> MOD_RES
<222> (10)...(10)
<223> Xaa = argininamide

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<400> 80
Xaa Arg Arg Arg Arg Arg Arg Arg Arg Xaa
1 5 10

<210> 81
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> delivery enhancing transporter moiety conjugate

<221> MOD_RES
<222> (8)...(8)
<223> Xaa = 6-maleimidocaproic hydrazone derivative of
FK506 conjugated to Cys

<400> 81
Arg Arg Arg Arg Arg Arg Arg Xaa
1 5

<210> 82
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> delivery enhancing transporter moiety conjugate

<221> MOD_RES
<222> (8)...(8)
<223> Xaa = dithioethyl hydrazone derivative of FK506
conjugated to Cys

<400> 82
Arg Arg Arg Arg Arg Arg Arg Xaa
1 5

<210> 83
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<223> delivery enhancing transporter moiety conjugate

<221> MOD_RES
<222> (1)...(1)
<223> Xaa = biotinylated aminocaproic acid (aca)

<221> MOD_RES
<222> (7)...(7)
<223> Xaa = cysteinamide

<400> 83
Xaa Arg Arg Arg Arg Arg Arg Xaa
1 5

```

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<210> 84
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> delivery enhancing transporter moiety conjugate

<221> MOD_RES
<222> (1)...(1)
<223> Xaa = biotinylated aminocaproic acid (aca)

<221> MOD_RES
<222> (9)...(9)
<223> Xaa = cysteinamide

<400> 84
Xaa Arg Arg Arg Arg Arg Arg Arg Xaa
1 5

<210> 85
<211> 11
<212> PRT
<213> Artificial Sequence

<220>
<223> delivery enhancing transporter moiety conjugate

<221> MOD_RES
<222> (1)...(1)
<223> Xaa = biotinylated aminocaproic acid (aca)

<221> MOD_RES
<222> (11)...(11)
<223> Xaa = cysteinamide

<400> 85
Xaa Arg Arg Arg Arg Arg Arg Arg Arg Xaa
1 5 10

<210> 86
<211> 25
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial
      Sequence:delivery-enhancing transporter polymer of
      poly-arginine molecules between 6 and 25 residues
      in length

<220>
<221> MOD_RES
<222> (7)...(25)
<223> Arg at positions 7-25 may be present or absent

<400> 86
Arg Arg
1 5 10 15
Arg Arg Arg Arg Arg Arg Arg Arg
20 25

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